We Claim:

1. A laser system comprising:

- at least one array of closely spaced diodes arranged to emit radiant pump energy; and
- a plurality of waveguides spaced adjacent the array, each waveguide being arranged to lase upon exposure to the radiant pump energy emitted from the diodes.
- 2. A laser system as claimed in claim 1, wherein the waveguides are arranged to lase at different frequencies.
- 3. A laser system as claimed in any one of the preceding claims, wherein the system further comprises a coupler for coupling laser outputs of individual ones of the waveguides to form a combined laser output.
- 4. A laser system as claimed in any one of the preceding claims, wherein the system further comprises reflection means spaced closely adjacent the waveguides and the array for reflecting the radiant pump energy emitted from the array back onto the waveguides.
- 5. A laser system as claimed in any one of the preceding claims, wherein the plurality of waveguides comprise a series of optical fibres.
- 6. A laser system as claimed in any one of the preceding claims, wherein the plurality of waveguides comprises a series of planar waveguides.
- 7. A laser system as claimed in any one of the preceding claims, wherein the waveguides form a multi-mode interference device.
- 8. A laser system as claimed in any one of the preceding claims, wherein the waveguides are be formed as part of a multimode waveguide structure which can be interconnected to a single mode waveguide.

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